

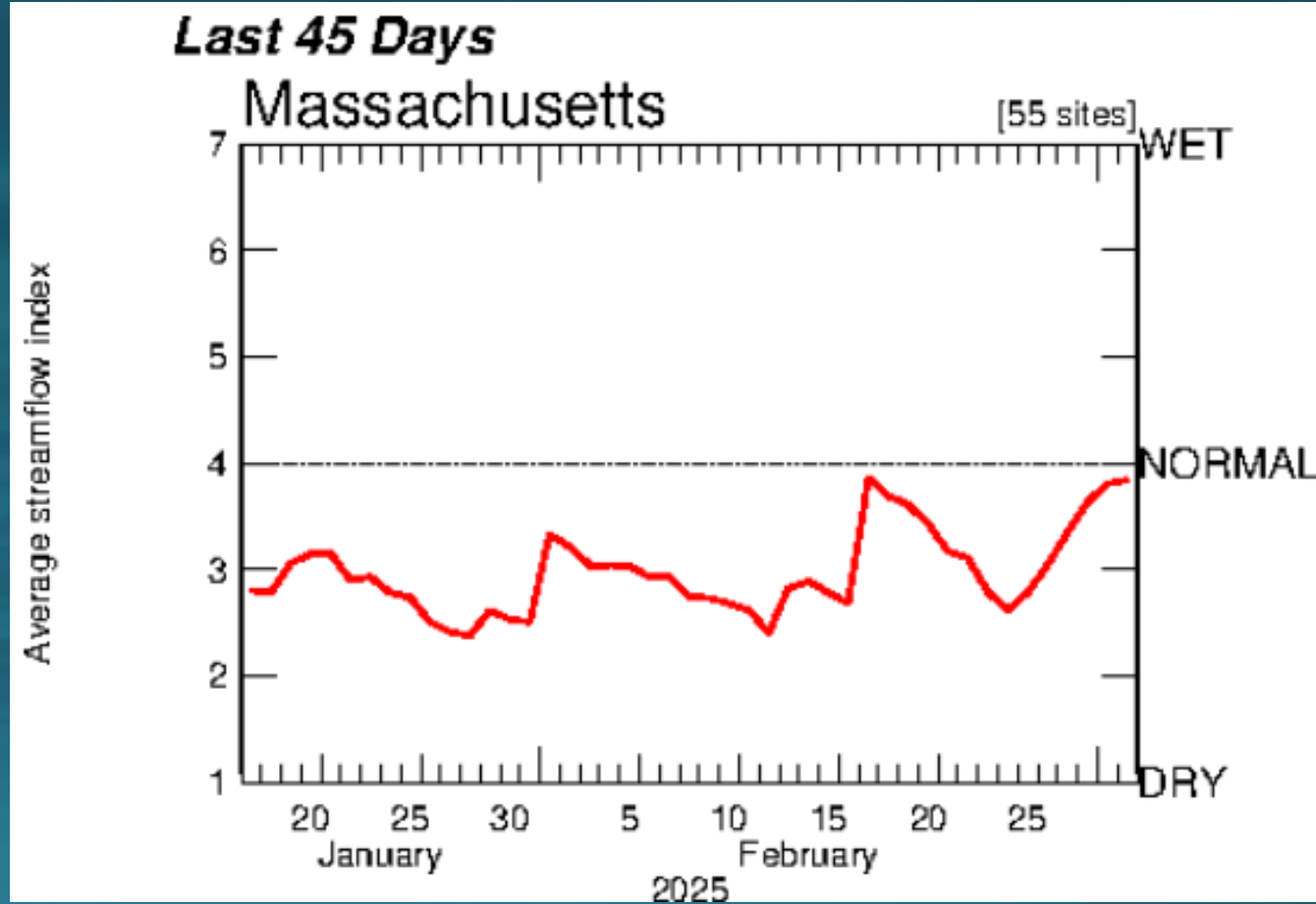
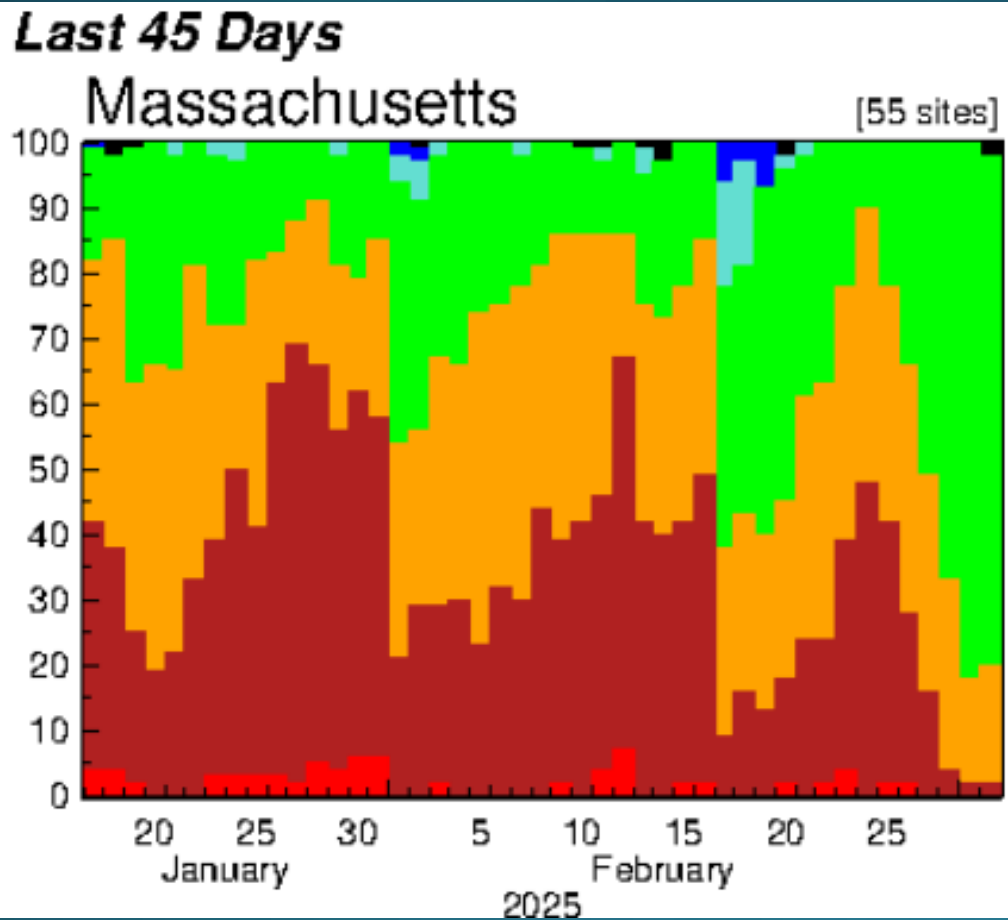
Streamflow and Groundwater Conditions in Massachusetts

Massachusetts Drought Task Force Meeting
March 6, 2025

U.S. Geological Survey
New England Water Science Center
Gardner Bent



Streamflow Conditions – last 45 days

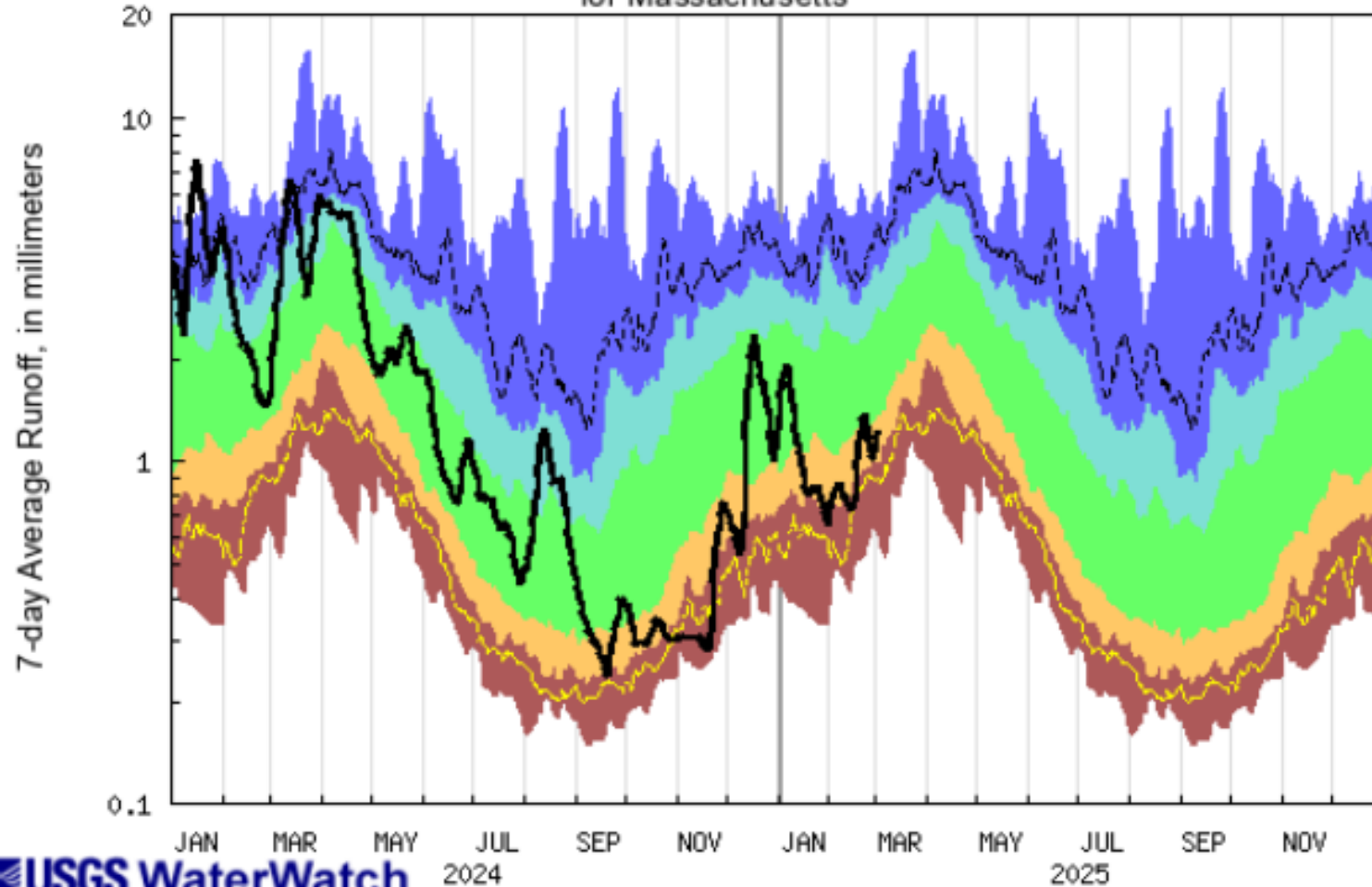


Explanation - Percentile classes

Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		



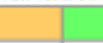
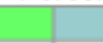


Streamflow Conditions – 7-Day Moving Average

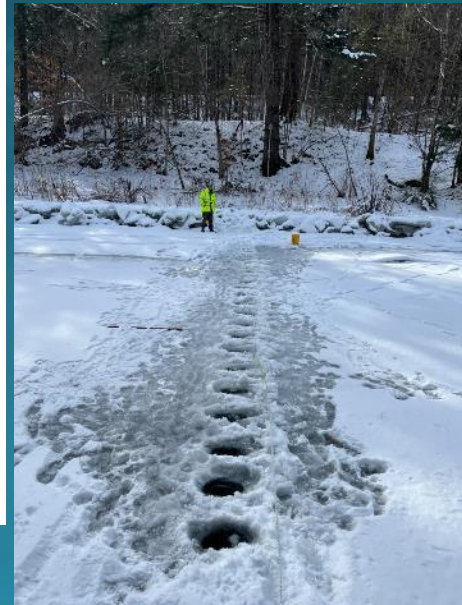
Duration hydrograph of 7-day average runoff for Massachusetts



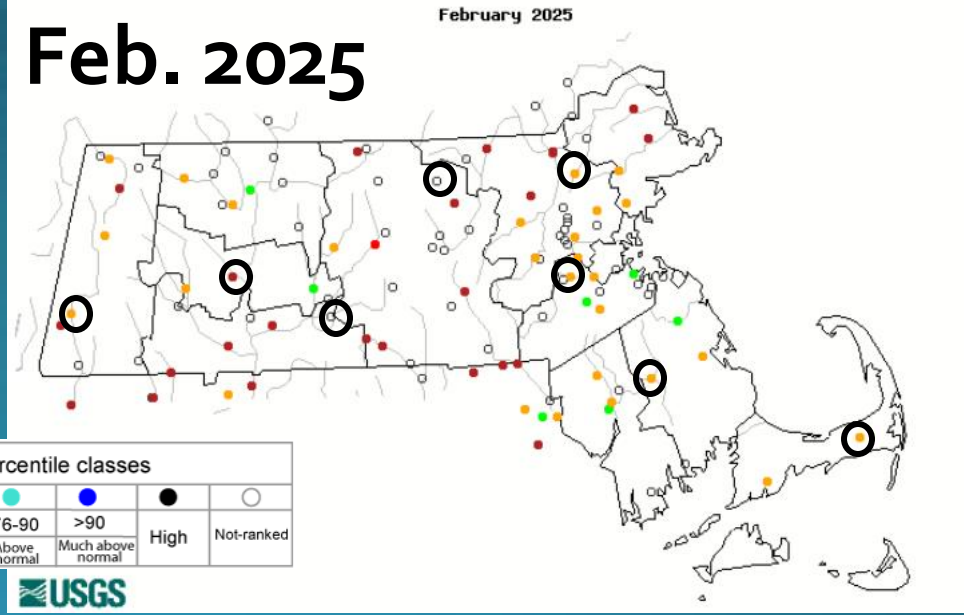
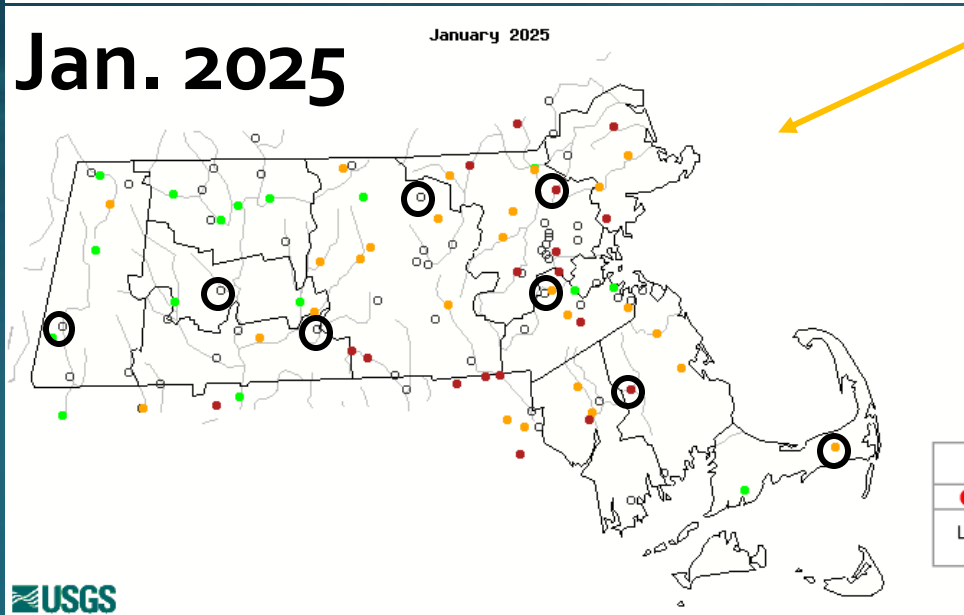
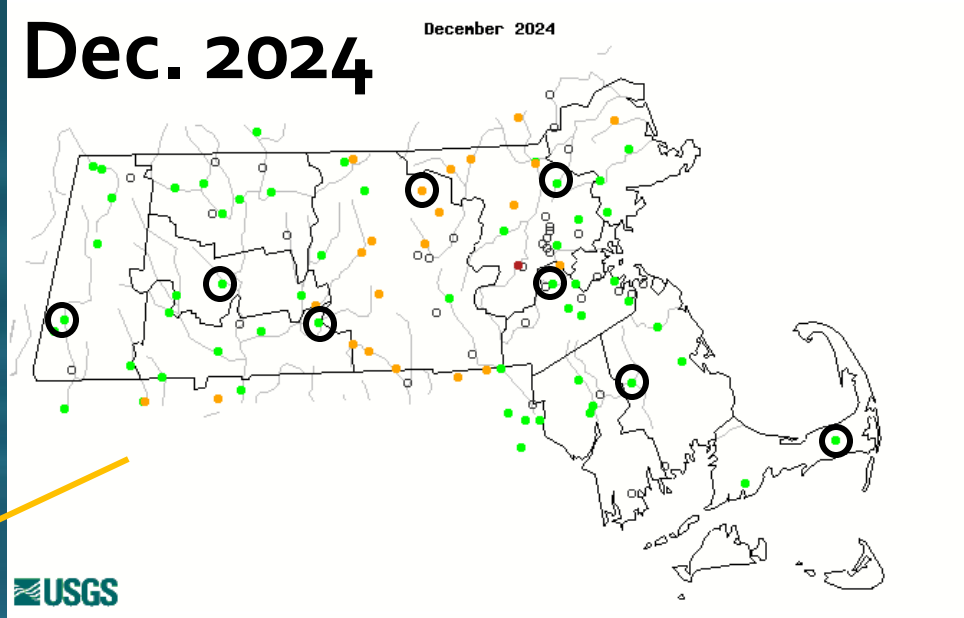
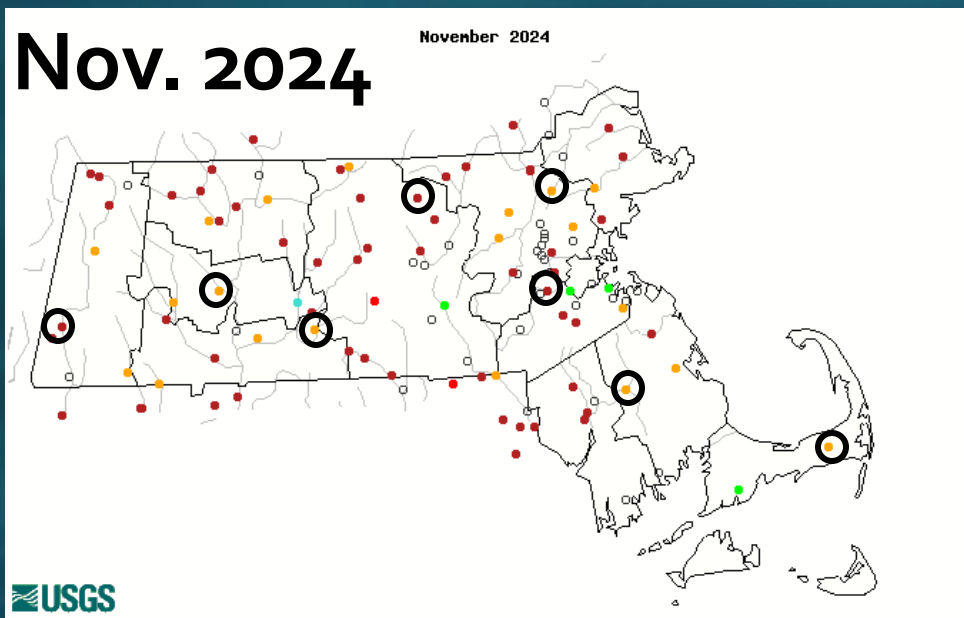
USGS WaterWatch

Last updated: 2025-03-03

Explanation - Percentile classes						
						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Runoff



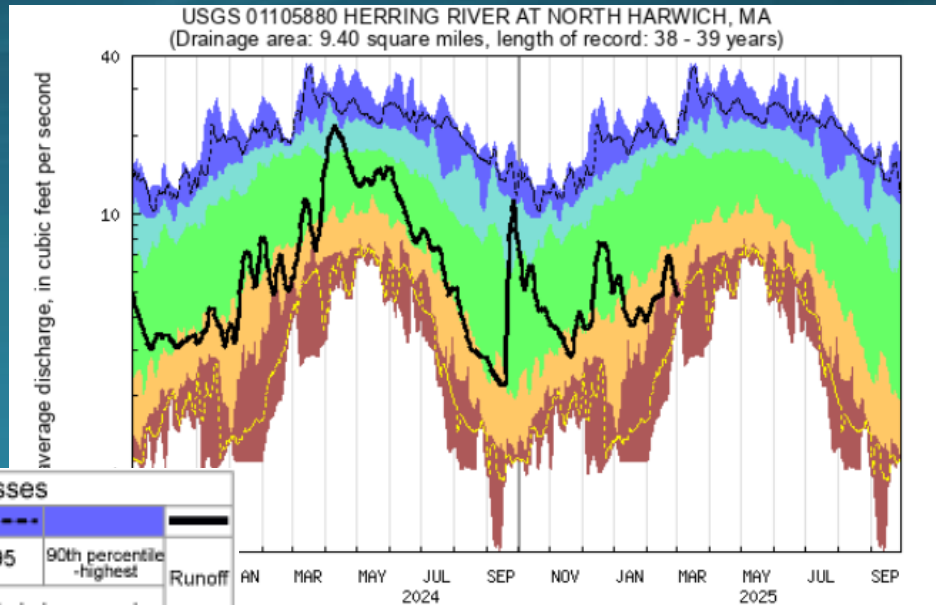
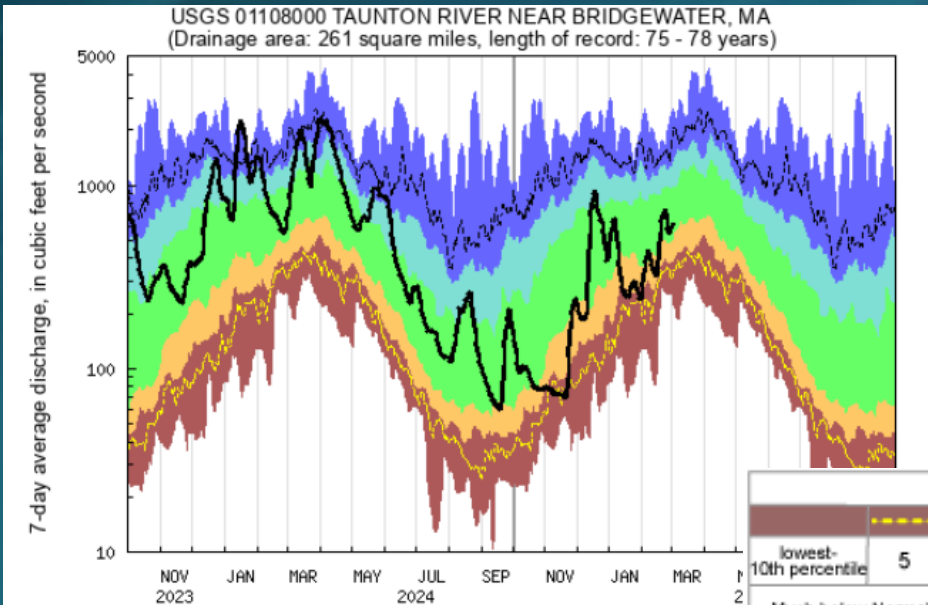
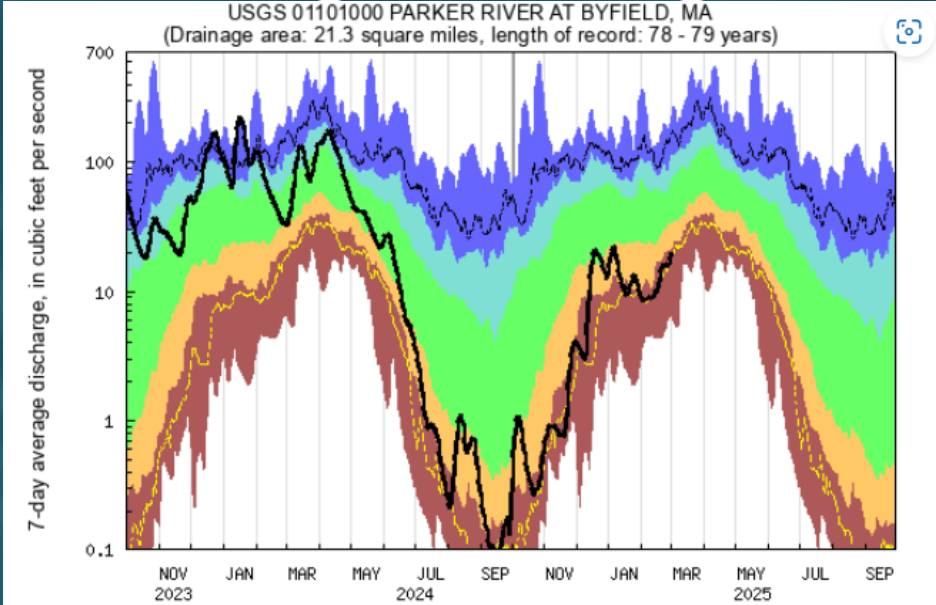
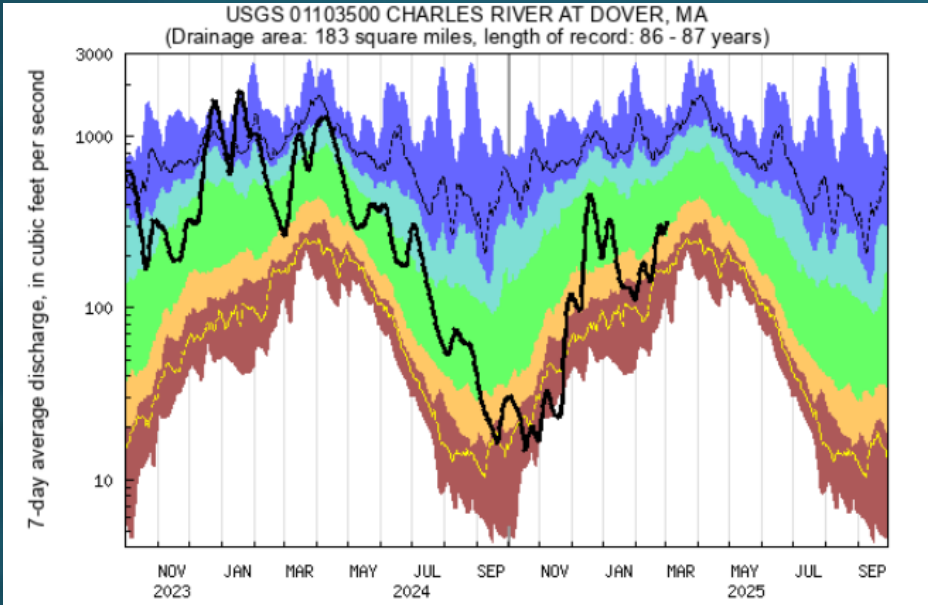
Streamflow Conditions – Monthly Average



Explanation - Percentile classes

●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	Not-ranked

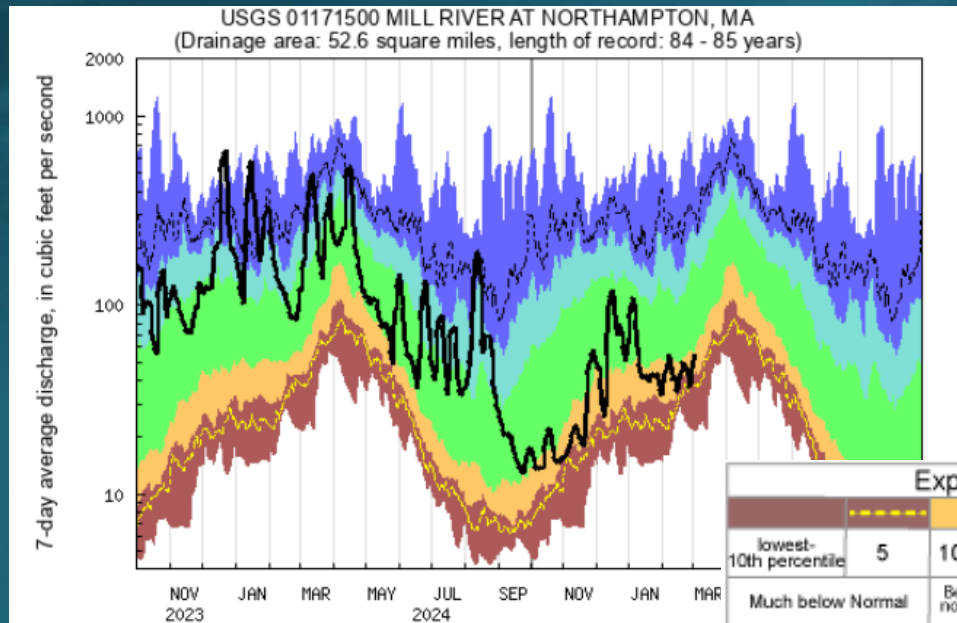
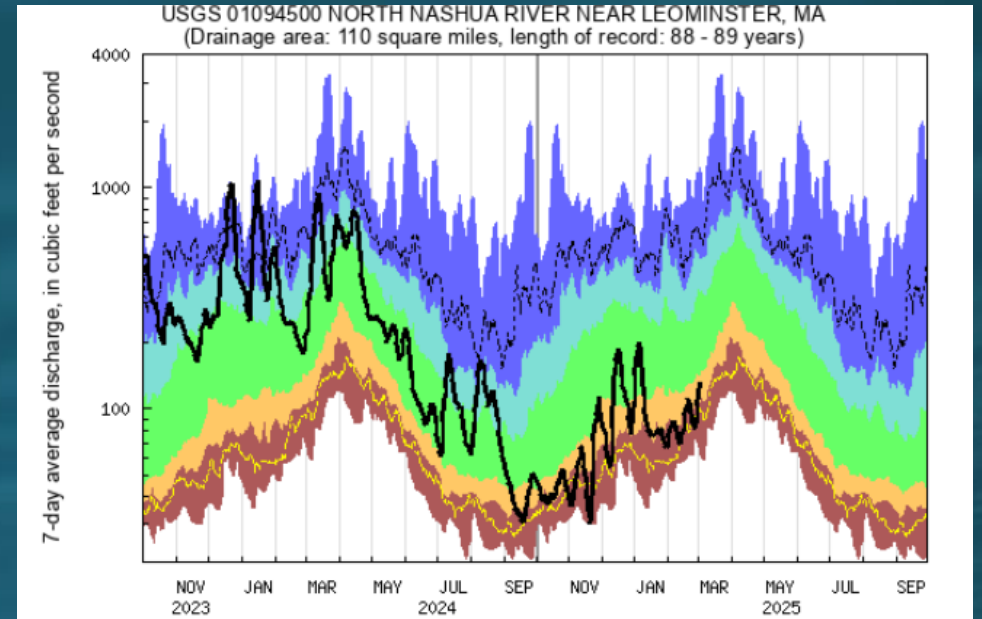
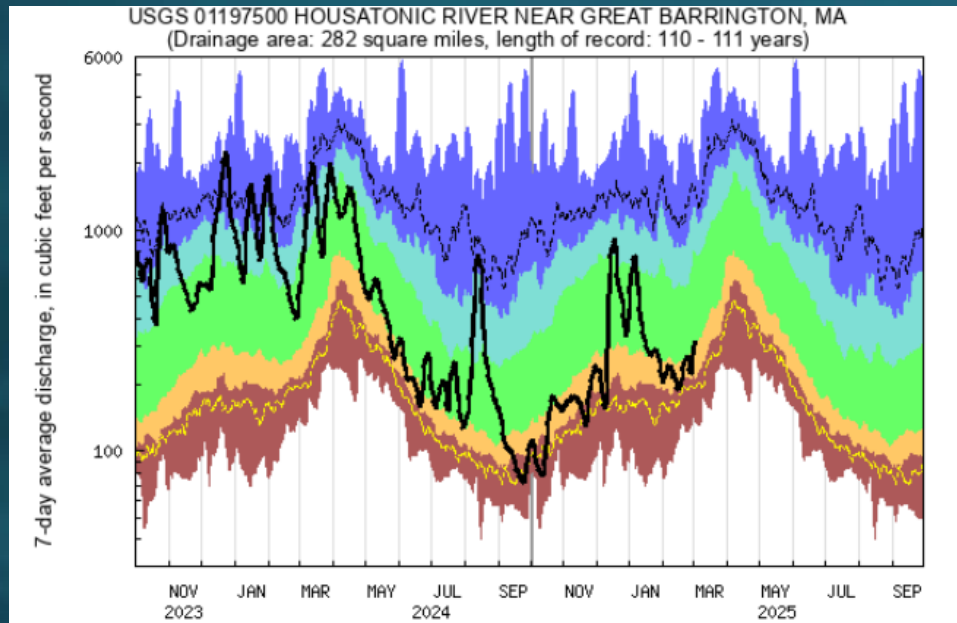
SW Conditions – 7-Day Moving Average



Explanation - Percentile classes

lowest-10th percentile	5	10-24	25-75	76-90	95
Much below Normal	Below normal	Normal	Above normal	Much above normal	Runoff

SW Conditions 7-Day Average

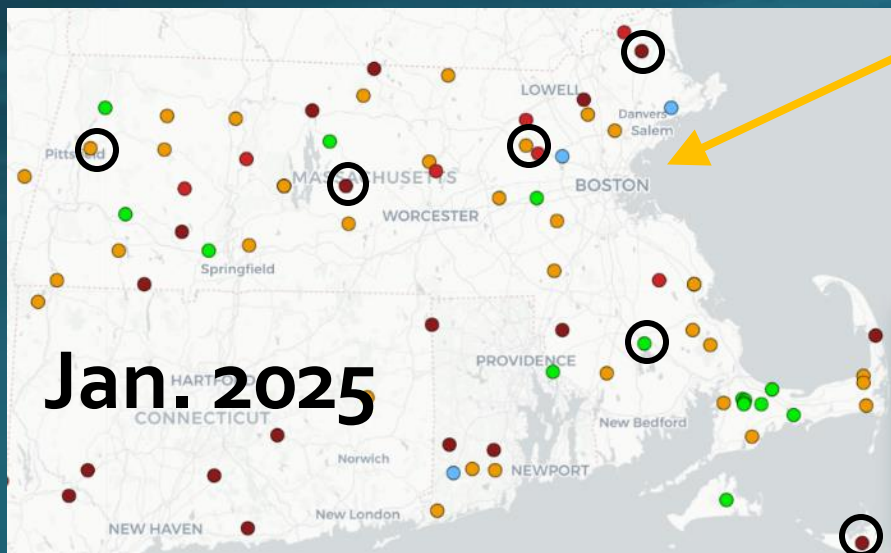


01176000
Quaboag
River at West
Brimfield, MA

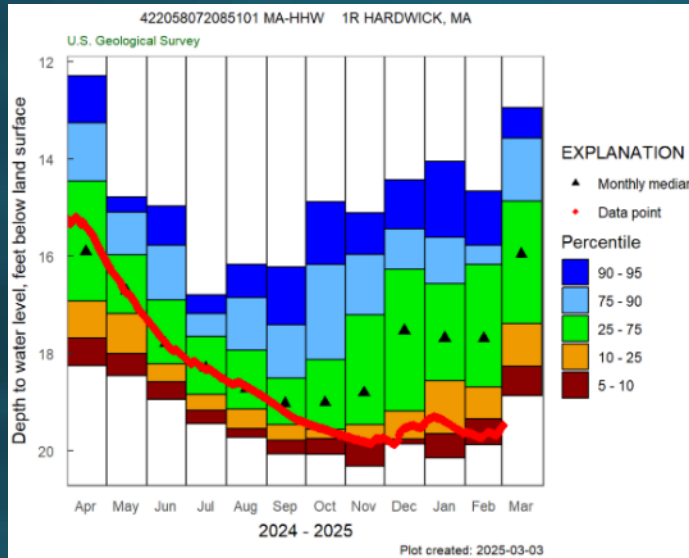
Explanation - Percentile classes

lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest	Runoff
Much below Normal		Below normal	Normal	Above normal	Much above normal		

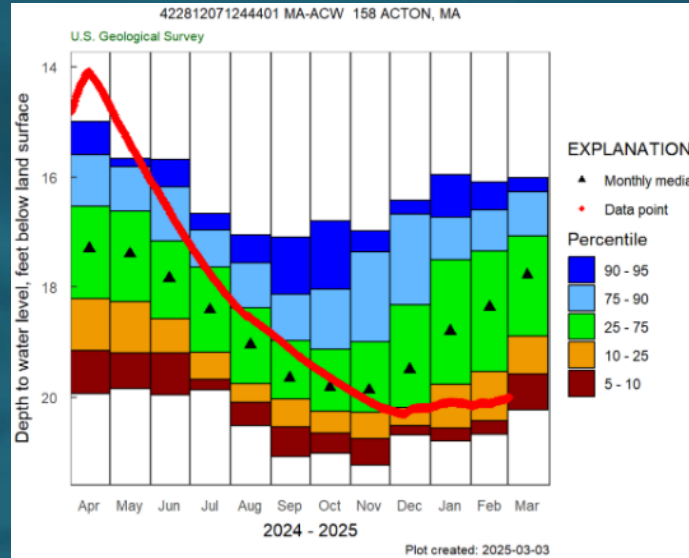
GW Conditions - End of Month – Cont. Wells Only



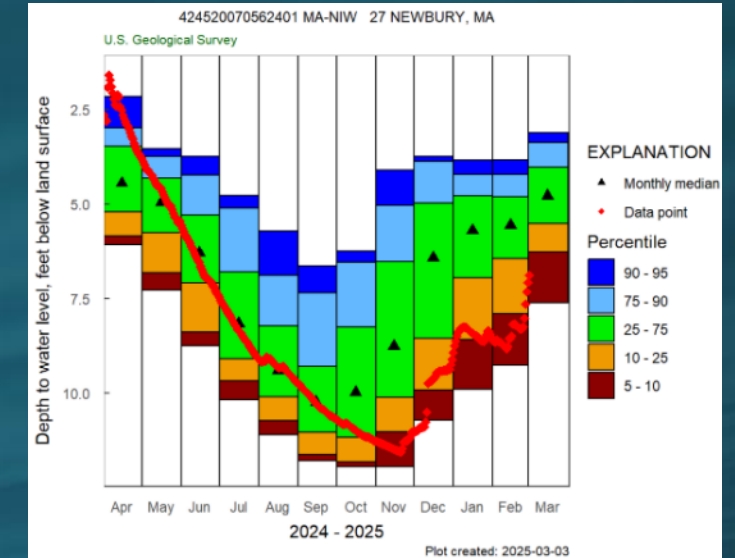
Groundwater Conditions – Selected Wells



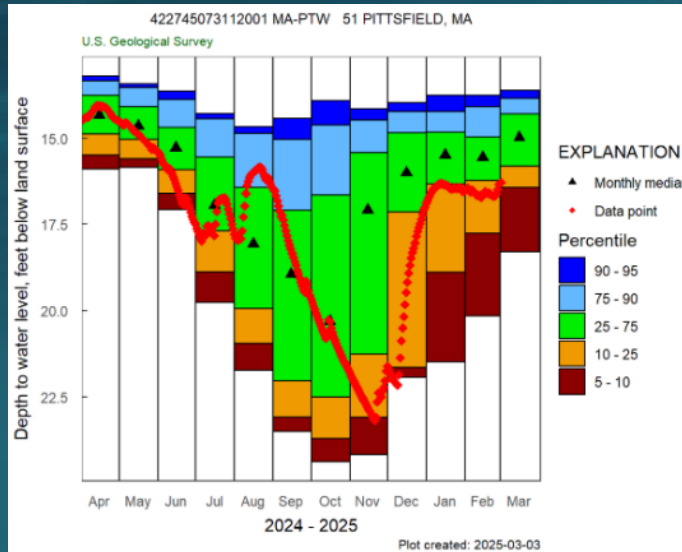
Period of Record: 60 yrs; Cont. 7 yrs



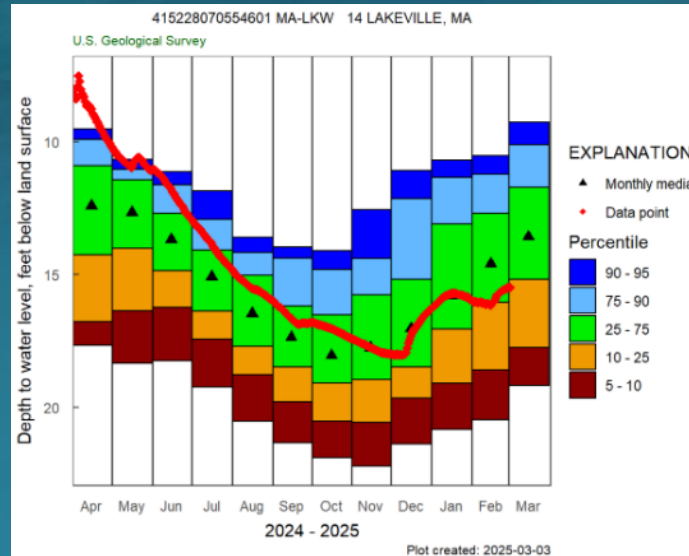
Period of Record: 60 yrs; Cont. 24 yrs



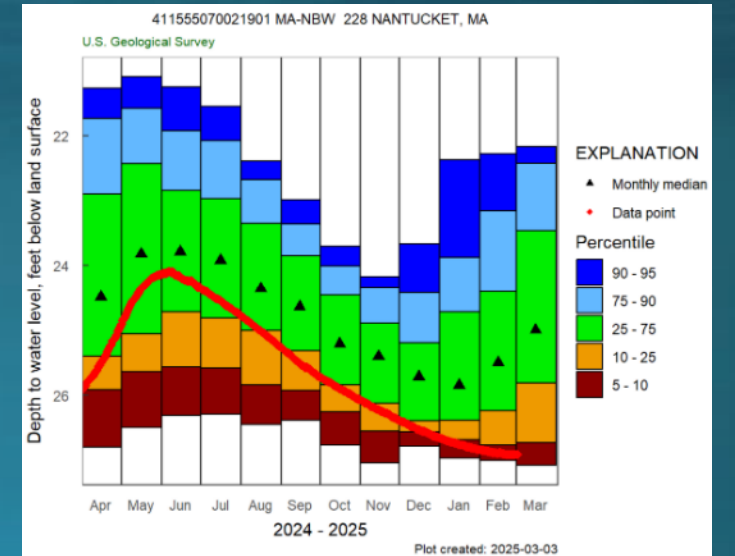
Period of Record: 64 yrs; Cont. 40 yrs



Period of Record: 61 yrs; Cont. 40 yrs



Period of Record: 60 yrs; Cont. 40 yrs



Period of Record: 49 yrs; Cont. 3 yrs

Summary of Conditions

- The presence of ice in the stream is preventing computations of streamflow at many gages.
- For gages with little to no ice, average February streamflow conditions were mainly below to much below normal across the State, except a few locations in the southeast region were normal.
- For those same gages, streamflow at the end of February were slightly higher than at the beginning of the month with the rainfall event at the end of the month.
- Groundwater-level conditions during February were mainly below or much below normal across the State, and similar to January.